

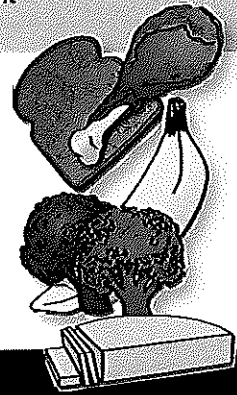
LESSON 1

Help Yourself to the Food Groups

Student Learning Objectives:	National Health Standards:
1. Describe the food groups, including recommended amounts to eat from each group.	• Core Concepts
2. Explain the rationale for eating more of some food groups than of others.	• Core Concepts
3. Develop a plan for eating the recommended amounts of food for one day.	• Self Management

Lesson Synopsis

Assess student knowledge about the importance of eating foods from all the food groups and their ability to recall the names of the food groups. Describe the recommended amounts of food fourth-grade students need from each food group and explain why more should be eaten from some food groups than others. Guide students in planning a menu for one day that includes the recommended amounts from all food groups.



Activity	Time in Minutes	Materials Needed
Introduction	5	<p>Health Education Materials</p> <ul style="list-style-type: none"> Curriculum: "Arianna's Nutrition Expedition," National Dairy Council (Extension Activity) <p>Teacher Manual Resources</p> <ul style="list-style-type: none"> Student Worksheet: "Food Group Facts" Teacher Key: "Food Group Facts-Part 1" <p>Supplied by the Teacher</p> <ul style="list-style-type: none"> Pens or pencils Computer (Extension Activity) Computer with Internet access (Extension Activity)
Teacher Input	15	<p>Health Education Materials</p> <ul style="list-style-type: none"> Poster Set: "MyPlate: Healthy Food Choices," Michigan Model for Health Clearinghouse <p>Teacher Manual Resources</p> <ul style="list-style-type: none"> Teacher Reference: "Whole Grains" Slide Master: "Recommended Amounts" <p>Supplied by the Teacher</p> <ul style="list-style-type: none"> Pencils or pens Crayons or markers Eight-ounce measuring cup Slide Projector Computer with Internet access (Extension Activity)

Application or Skill Practice	17	<p>Health Education Materials</p> <ul style="list-style-type: none"> • Pictures: "Food Photos," Michigan Model for Health Clearinghouse or Food Models, National Dairy Council • Curriculum: "Arianna's Nutrition Expedition," National Dairy Council (Extension Activity) <p>Teacher Manual Resources</p> <ul style="list-style-type: none"> • Teacher Reference—Assessment: "Assessment Rubric for Skill Development: Meal Planning" • Student Self-Assessment Rubric: "Meal Planning" <p>Supplied by the Teacher</p> <ul style="list-style-type: none"> • Computer (Extension Activity)
Closure	3	<p>Teacher Manual Resources</p> <ul style="list-style-type: none"> • Family Resource Sheet: "Food for Healthy Weight"
TOTAL	40	

Preparation

Prior to the Lesson:

- **Decide if you want to assess** student skill development. A rubric, "Assessment Rubric for Skill Development: Meal Planning," is provided for you to use at the end of this lesson.
- **Decide if you want students to assess** their own progress. **Duplicate** the rubric, "Meal Planning," for students if you plan to have them use it.
- **Decide if you will conduct the extension activity** using the lessons and CD-ROM from National Dairy Council's fourth grade curriculum, "Arianna's Nutrition Expedition." If so, **acquire** the curriculum from the National Dairy Council or United Dairy Industry of Michigan.

For Introduction and Teacher Input:

- **Duplicate** the student worksheet, "Food Group Facts," for each student.

For Teacher Input:

- **Read** the teacher reference, "Whole Grains."
- **Prepare a slide** from the slide master, "Recommended Amounts."
- **Display the poster**, "Fill Your Plate," from the poster set, "MyPlate: Healthy Food Choices." Create a space so the poster can be displayed throughout the next few health lessons.
- **Have** the "Food Group Signs" from the poster set, "MyPlate: Healthy Food Choices," **ready to post** near the poster.

For Application or Skill Practice:

- **Remove food models** that illustrate alcoholic beverages and throw them away. Food Models with a 2005, or later, copyright date do not include alcoholic beverages. Place the remaining food models or the "Food Photos" on a table where students can access them.





For Closure:


- **Duplicate** the family resource sheet, "Food for Healthy Weight," for students to take home.

LESSON PROCEDURE

Introduction: Review the food groups.


Approximately 5 minutes

Instructional Steps	Script & Detailed Directions	Extensions & Suggestions
Introduce the unit.	<i>We are going to learn about two important health habits: how to plan what to eat so we get all the nourishment our bodies need and the importance of being physically active.</i>	
Assess prior knowledge of the food groups.	<p><i>Today, we will focus on nutrition, and the amount of food a typical fourth grader should eat.</i></p> <p><i>If you have heard about the food groups, please raise your hand.</i></p> <p><i>If you think you know why it is important to know about them, rub your stomach.</i></p>	 <p>If students lack knowledge of the food groups, use Lesson 1 of the National Dairy Council's fourth grade curriculum, "Arianna's Nutrition Expedition," to provide an explanation of the food groups.</p>
Ask about the importance of the food groups.	<p><i>Why is it important to know about the food groups?</i></p> <p>Answer: If we eat a variety of foods from all the food groups, we will get the nutrients we need to be healthy.</p>	 <p>For more information, refer to the "Dietary Guidelines for Americans, 2010," online.</p> <p>www.health.gov/dietaryguidelines/</p> <p>Information appropriate for various age groups can be found online.</p> <p>www.ChooseMyPlate.gov</p>
<p>Ask students to recall the food groups using the student worksheet, "Food Group Facts."</p> 	<p><i>Record the names of the food groups across the top of your worksheet. If you can't remember all of them, you may ask a neighbor to help you.</i></p> <p>Pause until students have finished writing.</p>	 <p>If you think your students lack the information needed to record the names, provide the names of the food groups and have students write them on their worksheets.</p>

<p>Review the food groups. Display the poster, "Fill Your Plate," from the "MyPlate: Healthy Food Choices."</p>	<p>Name each food group and briefly describe it. Add the colored section to the poster as you describe each food group.</p> <p><i>Fruits and vegetables are two of the food groups. They come from plants. They are low in fat and rich in vitamins and minerals. The vitamins and minerals they contain help our bodies in many ways. They help us fight infections, help cuts and scrapes heal, and prevent strokes and heart disease.</i></p> <p><i>Grains is another food group. They come from plants and contain vitamins, carbohydrates, and fiber, especially whole grains. They give us extra energy.</i></p> <p><i>A fourth food group is dairy. This food group provides calcium our bodies need to build strong bones.</i></p> <p><i>Protein foods is the last food group. It contains foods to help us grow and build strong muscles.</i></p> <p><i>Because most of the food in the dairy and protein foods group come from animals, they tend to be higher in fat, especially saturated fat, than foods that come from plants. It is important to choose low-fat dairy products and lean or low-fat protein foods, such as skinless poultry. Beans, nuts, and tofu are plant sources of protein and do not contain saturated fats.</i></p>	 <p>The United States Department of Agriculture uses the following titles for the food groups:</p> <ul style="list-style-type: none"> • Vegetables • Fruits • Grains • Dairy • Protein Foods
<p>Introduce the day's topic.</p>	<p><i>Today, we will learn more about the amount of food we need from each group to help keep our bodies strong and healthy.</i></p>	

Teacher Input: Discuss the recommended amount to eat of each food group.

Approximately 15 minutes

Instructional Steps	Script & Detailed Directions	Extensions & Suggestions
<p>Be prepared to add the rectangular "Food Group Signs" around the poster so that students can see the names of food groups more easily.</p>	<p><i>Each colored section on this poster represents a food group. You will notice that not all of the sections are the same size. That's because we should eat more of some food groups than of others.</i></p> <p>Hold up the measuring cup.</p> <p><i>The amount of vegetables, fruits, and dairy products we need is measured in cups. This is one cup. Let's do some guessing about how much students your age need to eat from each group.</i></p> <p>Post the rectangular "Vegetables" food group sign at the side of the plate poster.</p> <p><i>How many cups of vegetables do you think fourth graders need to eat each day?</i></p> <p>Call on a couple students to guess.</p>	 <p>Encourage your food service partners to read the online book "Fruit and Vegetables Galore: Helping Kids Eat More" by Team Nutrition. It provides food service tips for increasing student intake of fruits and vegetables.</p> <div data-bbox="868 1659 1445 1711"> www.fns.usda.gov/tn/Resources/fv_galore.html </div>

Explain the recommended amount of vegetables to eat. Use the slide, "Recommended Amounts," to illustrate.



Have students write in the daily amount and draw pictures of two or three favorite vegetables on their worksheet. Use the teacher key, "Food Group Facts-Part 1," as a guide if needed.



Most fourth grade boys who get a moderate amount of physical activity need 2 1/2 cups of vegetables each day. Fourth grade girls need 2 cups.

Uncover the column for vegetables on the slide. Keep the other columns covered.

Write the amount of vegetables recommended for fourth grade boys and girls in the vegetable column on your worksheet and draw two or three of your favorite vegetables. Try to think of different vegetables than those pictured on the slide.



This lesson lists general recommendations for the amount of food to be eaten from each food group. The MyPlate website, provides specific recommendations based on age, gender, and how physically active a person is.

www.ChooseMyPlate.gov

Explain the recommended amount of fruits to eat.

Have students write in the daily amount and draw pictures of two or three favorite fruits on their worksheet.

Post the rectangular "Fruits" food group sign at the side of the plate poster.

How many cups of fruit do you think fourth graders need to eat each day?

Call on a couple students to guess.

Most fourth graders need 1 1/2 cups of fruits each day.

Uncover the column for fruits on the slide.




When you are choosing fruits and vegetables, try to eat red, yellow, green, orange, white, and blue. The more colors you eat, the more vitamins you will get. Remember. Vary your veggies and focus on fruits. Notice that 1/2 of the plate is fruits and vegetables.





Write the amount of fruits recommended for fourth graders in the fruit column on your worksheet and draw two or three of your favorite fruits.





Encourage your food service partners to visit the United States Department of Agriculture website. Check on the availability of posters and other visuals to display in the cafeteria.

www.ChooseMyPlate.gov



<p>Explain the recommended amount of foods from the dairy group.</p> <p>Have students write in the daily amount and draw pictures of two or three favorite dairy products on their worksheet.</p>	<p>Post the rectangular "Dairy" food group sign.</p> <p>Think about how many cups most fourth graders need of foods from the dairy group. Hold up the number of fingers that represents your guess.</p> <p><i>Most fourth graders need three cups or the equivalent from the dairy group each day. Milk and yogurt is measured in cups. Cheese is measured in ounces. One and a half ounces of hard cheese is equivalent to one cup of milk.</i></p> <p>Uncover the column for dairy on the slide.</p> <p><i>This food group provides the mineral calcium that you need to make strong bones and teeth. Choose low-fat or fat-free options.</i></p> <p><i>Write the amount recommended for fourth graders in the dairy column on your worksheet and draw two or three of your favorite foods that belong in this group.</i></p>	<p> Encourage students to learn more about the importance of calcium by playing interactive educational games at the National Institutes of Health website called Milk Matters.</p> <p>www.nichd.nih.gov/milk/kidsteens.cfm</p>
<p>Explain the recommended amount of grains. Use the teacher reference, "Whole Grains," for ideas.</p> <p></p> <p>Have students write in the daily amount and draw pictures of two or three favorite foods in the grains group on their worksheet.</p>	<p>Post the rectangular "Grains" food group sign.</p> <p><i>Grains are measured in ounces rather than cups. An ounce of grains is a little harder to picture than a cup. We'll talk more about this later. To give you an idea, one slice of store-bought bread is one ounce.</i></p> <p>How many ounces of grains do you think fourth graders need to eat each day?</p> <p>Call on a couple students to guess.</p> <p><i>Most fourth grade boys who are moderately active need to eat 6 ounces of grains each day and girls need 5 ounces.</i></p> <p>Uncover the column for grains on the slide.</p> <p><i>At least half of the grains you eat should be whole grains because they have more nutrients than bleached or white flour products. Whole grain wheat, brown rice, oatmeal, and popcorn are examples of whole grains.</i></p> <p><i>Write the amount of grains recommended for fourth grade boys and girls in the grain column on your worksheet and draw two or three of your favorite foods that belong in the grain group.</i></p>	<p> If your students are unfamiliar with foods in the grain group, you may want to brainstorm a list of possibilities.</p>



<p>Explain the recommended amount for the protein foods group.</p> <p>Have students write in the daily amount and draw pictures of two or three favorite foods from the protein foods group on their worksheet.</p>	<p>Post the rectangular "Protein Foods" food group sign.</p> <p><i>We have one group left: the protein foods group. Most fourth graders need to eat five ounces of foods from this group each day. We'll talk more about how much this is later.</i></p> <p>Uncover the column for protein foods on the slide.</p> <p><i>When you choose foods from this group, select low-fat options, such as skinless chicken or fish. Most of us eat too much food from this group, so it is important to try to focus more on the fruit and vegetable groups.</i></p> <p><i>Write the amount recommended for fourth graders in the protein foods column on your worksheet and draw two or three of your favorite foods that belong in this group.</i></p>	 <p>Mention the importance of choosing low-fat milk and meat products. Low-fat milk is 1%, 1/2% or skim (fat-free) milk.</p>
<p>Discuss the reason some food groups have greater recommended amounts than others.</p>	<p><i>You have probably noticed that you are supposed to eat more cups of vegetables and dairy products than of fruit and more ounces of grains than of protein foods. Why do you think you need more of some food groups and less of others?</i></p> <p>Call on students to share their ideas.</p> <p>Explain why food groups have different recommended quantities.</p> <p><i>Experts in nutrition have learned how many calories, as well as, the amounts of vitamins, minerals, and other nutrients you need. Then, they figured out how much of each food group should be eaten to give you the right amount of these nutrients. Since each food group contains different nutrients, you need more of some food groups than others to get all the nutrients you need. This is why each section is a different size.</i></p>	 <p>Ask your food service staff to label all foods according to their food group(s) and post signs reminding students how much needs to be eaten from each food group daily. Have students work with food service staff to create the signs.</p>  <p>Have students create nutrition messages to go on school menus.</p>  <p>Have students create a PowerPoint presentation on nutrition for other classrooms. Consider using a digital camera for visuals.</p>

Assist students in menu planning.	Circulate and assist students in selecting nutrient-dense foods. Help students replace any foods that are high in fats or sugar with foods containing whole grains, fruits, vegetables, low-fat dairy, and lean protein foods. Eating meals made from these foods is a good way to include nutrient-dense foods.	 <p>Nutrient-dense foods are those that contain over 20% of a person's daily requirement of a vitamin, mineral, carbohydrate or protein. If a food contains 5% or less of a nutrient, it has a low amount of that nutrient. Reading food labels is a good way to tell whether or not a food is nutrient dense. Food labels show the Percent of Daily Value for a typical 2000 calorie diet. Food labels can also help you choose foods low in fat content, especially saturated and trans fats, as recommended by the Dietary Guidelines.</p>
Report sample menus to class.	<p>Call on two or three students to share their sample daily menu.</p> <p>Have other students count to see if the menu includes the recommended amounts of the food groups.</p>	 <p>Graph the foods selected according to food group.</p>

Closure: Review the food groups and the importance of eating a variety of foods from each group.

Approximately 3 minutes

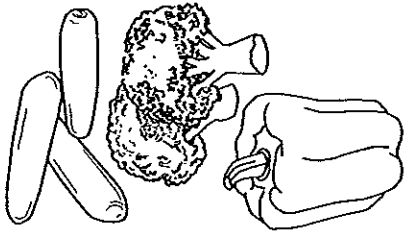
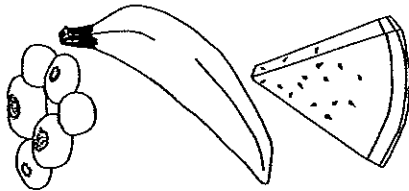
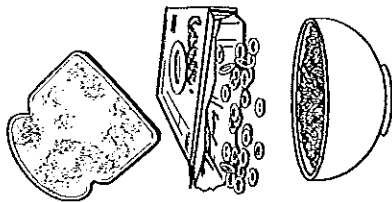
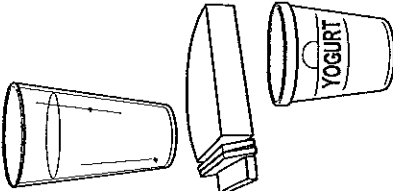
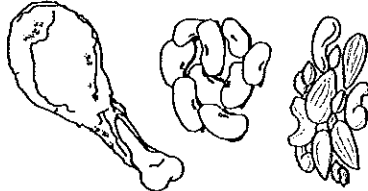
Instructional Steps	Script & Detailed Directions	Extensions & Suggestions
Ask students to review the food groups and why it's important to eat a variety of foods from all of the groups.	<p><i>Who can tell me the name of one of the food groups and an example of a food from that group?</i></p> <p><i>Think about one of your favorite foods. Tell your neighbor what it is and what food group it belongs in.</i></p> <p><i>Why is it important to eat a variety of foods, not just your favorite food?</i></p> <p>Answer: We can get all the needed vitamins and minerals and other nutrients when we eat many different foods from all food groups.</p>	
Save the student worksheet, "Food Group Facts," for Lesson 2 in this unit. 	<i>Keep your worksheet in a safe place here at school. You will use it again during our next nutrition lesson.</i>	 <p>Collect the worksheets if needed.</p>

<p>Distribute the family resource sheet, "Food for Healthy Weight."</p> 	<p><i>Be sure to share this information about food groups and how much to eat with your families tonight.</i></p>	
<p>Introduce the next lesson.</p>	<p><i>In our next health lesson, we will learn how to tell how much to eat. We'll find out what one cup and one ounce look like.</i></p>	 <p>Have students notice and list the food advertisements they see on television or in magazines or newspapers. Suggest that they bring magazines or newspaper ads to class. You will ask for this information and use the ads in Lesson 3 of this unit.</p>





Recommended Amounts

Food Groups	1. Vegetables	2. Fruits	3. Grains	4. Dairy	5. Protein Foods
Amount to Eat Each Day	Boys: 2 1/2 cups Girls: 2 cups	1 1/2 cups	Boys: 6 ounces Girls: 5 ounces	3 cups	5 ounces
My Favorites					


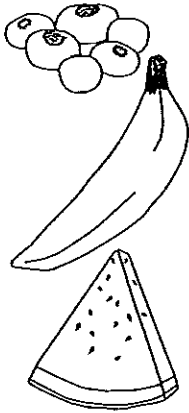
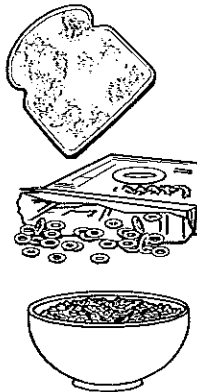

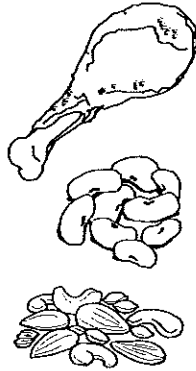


Food Group Facts

	1.	2.	3.	4.	5.
Food Groups					
Amount to Eat Each Day					
My Favorites					
Estimating the Amount of Food					



Food Group Facts—Part 1

Food Groups	1. Vegetables	2. Fruits	3. Grains	4. Dairy	5. Protein Foods
Amount to Eat Each Day	Boys: 2 1/2 cups Girls: 2 cups	1 1/2 cups	Boys: 6 ounces Girls: 5 ounces	3 cups	5 ounces
My Favorites					
Estimating the Amount of Food	Save for Lesson 2 in this unit				



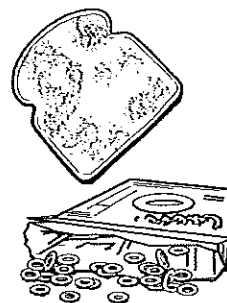
Whole Grains

To determine if a product contains whole grain, read the ingredient list on the food label. The whole grain should be the first ingredient listed. Most foods will say “whole” or “whole grain” before the ingredient name, such as “whole grain wheat.” Some exceptions that are whole grain even though they aren’t listed that way are brown rice, oatmeal, popcorn, wild rice, and bulgur.

The following are whole grains:

- Whole wheat
- Whole oats or oatmeal
- Whole-grain corn
- Popcorn
- Brown rice
- Whole rye
- Whole-grain barley
- Wild rice
- Buckwheat
- Whole-grain Triticale
- Bulgur (cracked wheat)
- Millet
- Quinoa
- Whole-grain Sorghum

Food for Healthy Weight



Did you know...



- One child in five is overweight.*
- Children who watch the most hours of television have the highest incidence of obesity.*
- More than twice as many children are overweight now than three decades ago.*

Whether your child is overweight or not, the same guidelines apply. To have a healthy weight, we all need to eat smart and get plenty of physical activity.

Your fourth-grader has been learning about food and what to eat to stay healthy. He or she knows that eating foods from all of the food groups each day will promote health and reduce the chances for disease. However, we need to know more than the basic food groups if we want to have a healthy diet. In general, children eat too few fruits, vegetables, and whole grains. They eat too many foods that are high in fat, sugar, and calories, such as cakes, candy, fried foods, packaged foods and restaurant meals. Read on to learn some practical ways to help your child eat smart.

Guidelines for Americans

To help us learn how to stay healthy, the U.S. Department of Agriculture has developed the "Dietary Guidelines for Americans, 2010." Visit www.healthierus.gov/dietaryguidelines to read the document. You can find tip sheets based on the guidelines at www.choosemyplate.gov. Here is a sample of the type of information you will find in the tip sheets. These tips are from Tip Sheet No. 1, Choose MyPlate.

1. **Balance calories.** Find out how many calories you and your family members need for a day. Go to www.ChooseMyPlate.gov to find your calorie level. Being physically active also helps you balance calories.
2. **Enjoy your food, but eat less.** Take the time to fully enjoy your food as you eat it. Eating too fast or when your attention is elsewhere may lead to eating too many calories. Pay attention to hunger and fullness cues before, during, and after meals. Use them to recognize when to eat and when you've had enough.
3. **Avoid oversized portions.** Use a smaller plate, bowl, and glass. Portion out foods before you eat. When eating out, choose a smaller size option, share a dish, or take home part of your meal.
4. **Foods to eat more often** – vegetables, fruits, whole grains, and fat-free or 1% milk and dairy products. These foods have the nutrients you need for health—including potassium, calcium, vitamin D, and fiber. Make them the basis for meals and snacks.
5. **Make half your plate fruits and vegetables.** Choose red, orange, and dark-green vegetables like tomatoes, sweet potatoes, and broccoli, along with other vegetables for your meals. Add fruit to meals as part of main or side dishes or as dessert.
6. **Switch to fat-free or low-fat (1%) milk.** They have the same amount of calcium and other essential nutrients as whole milk, but fewer calories and less saturated fat.
7. **Make half your grains whole grains.** To eat more whole grains, substitute a whole-grain product for a refined product—such as eating whole-wheat bread instead of white bread or brown rice instead of white rice.
8. **Foods to eat less often** – foods high in solid fats, added sugars, and salt. They include cakes, cookies, ice cream, candies, sweetened drinks, pizza, and fatty meats like ribs, sausages, bacon, and hot dogs. Use these foods as occasional treats, not everyday foods.
9. **Compare sodium in foods.** Use the Nutrition Facts label to choose lower sodium versions of foods like soup, bread, and frozen meals. Select canned foods labeled "low sodium," "reduced sodium," or "no salt added."
10. **Drink water instead of sugary drinks.** Cut calories by drinking water or unsweetened beverages. Soda, energy drinks, and sports drinks are a major source of added sugar, and calories, in American diets.



*National Institutes of Health, www.nih.gov

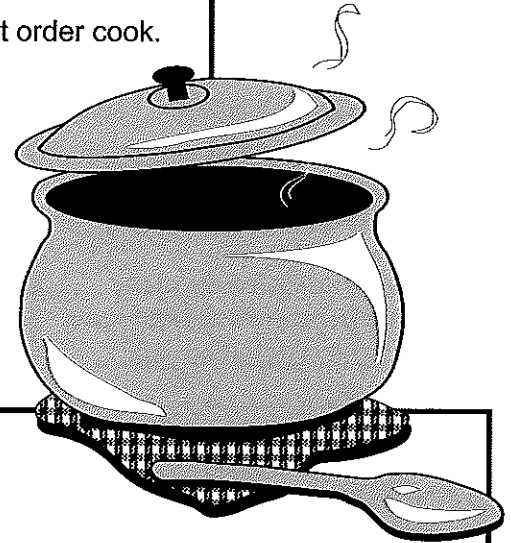
Source: Tip Sheet No. 1, June, 2011, www.ChooseMyPlate.gov

Create a Pleasant Mealtime Environment

Creating a pleasant mealtime is critical to getting children to eat healthful foods. The best mealtime environment requires setting rules and having consistent meal times.

- Limit snacking and sweetened drinks before meals so children come to meals hungry. When hungry, children will try new foods more often.
- Encourage your child to try new foods. Serve a small portion and don't force her or him to finish it.
- Model healthy eating. Eat your fruits and vegetables.
- Offer the same meal to everyone in the family. Don't be a short order cook.
- Have a weekly dinner schedule so children know when dinner will be available.
- Have children help with dinner preparation. They are more likely to try something they have helped prepare.

Adapted from: *Healthy Kids Healthy Weight*
Michigan Department of Health and Human Services
Michigan Department of Education
www.mihealthtools.org/schools



Help Your Children Maintain a Healthy Body Weight

- Be supportive. Children know if they are overweight and don't need to be reminded or singled out. They need acceptance, encouragement and love.
- Set guidelines for the amount of time your children can spend watching television or playing video games. Consider a daily limit of two hours or less.
- Plan physically active family activities. Instead of watching TV, go hiking or biking, wash the car, or walk around a mall. Offer choices and let your children decide.
- Be sensitive. Find activities your children will enjoy that aren't difficult or could cause embarrassment.
- Eat meals together as a family and eat at the table, not in front of a television. Eat slowly and enjoy the food.
- Don't use food as a reward or punishment. Children should not be placed on restrictive diets, unless done so by a doctor for medical reasons. Children need food for growth and energy.
- Involve your children in meal planning and grocery shopping. This helps them learn and gives them a role in the decision making.
- Keep healthy snacks on hand. Good options include fresh, frozen, or canned fruits and vegetables; low-fat cheese, yogurt or ice cream; frozen 100% fruit juice bars; and cookies such as fig bars, graham crackers, gingersnaps or vanilla wafers.
- Focus on small, gradual changes in eating and activity patterns. This helps form habits that can last a lifetime.

Adapted from: *The NIH Word on Health*, June 2002,
National Institutes of Health



Assessment Rubric for Skill Development: Meal Planning

The following rubric can be used for assessing student skill development. The student has demonstrated the following elements of this skill through role play, written assignments, or classroom activities.

Elements in the Lesson

- Include all the food groups
- Include the required amounts of each food group
- Include a variety of foods within the food groups

1	2	3	4	Comments
Not all food groups are represented.	All food groups are represented, but few have the required amounts.	All food groups are represented and all have the required amounts.	All food groups are represented, all have the required amounts, and there is a variety of foods within the food groups.	

**Meal Planning****Directions:**

Circle the number that best describes how you did on this assignment. Write any ideas or thoughts you have in the column titled "Comments."

1	2	3	4	Comments
I didn't include all of food groups.	I included all of the food groups, but few had the required amounts.	I included all of the food groups and all have the required amounts.	I included all of the food groups, all have the required amounts, and there is variety of foods within the food groups.	